

Product datasheet for **KN301242**

Angptl4 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)
Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA: GFP-puro
Symbol: Angptl4
Locus ID: 57875
Components: **KN301242G1**, Angptl4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCGTCCCAGGATGCAAAGCG
KN301242G2, Angptl4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTAGCCGCGCATAGCACCA
KN301242D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

```
GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG ACGAGCGTGA CACCACGATG CCTGTAGCAA
TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGGCAAC AATTAATAGA
CTGGATGGAG GCGGATAAAG TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT
GATAAATCTG GAGCCGGTGA GCGTGGTTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC AGATCGCTGA
GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTCAGAC CAAGTTTACT CATATATACT TTAGATTGAT
TTAAAACCTC ATTTTAAATT TAAAAGGATC TAGGTGAAGA TCCTTTTTGA TAATCTCATG ACCAAAATCC
CTTAACGTGA GTTTTCGTTC CACTGAGCGT CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC
TTTTTTCTG CGCGTAATCT GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG
GATCAAGAGC TACCAACTCT TTTTCCGAAG GTAAGTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAAGTCT TGTAGCACCG CCTACATACC TCGCTCTGCT
AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG GGTGGACTC AAGACGATAG
TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT CGTGACACACA GCCCAGCTTG GAGCGAACGA
CCTACACCGA ACTGAGATAC CTACAGCGTG AGCTATGAGA AAGCGCCACG CTTCGCGAAG GGAGAAAGGC
GGACAGGTAT CCGGTAAGCG GCAGGGTCCG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC
TGGTATCTTT ATAGTCCTGT CCGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTTGTGA TGCTCGTCAG
GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT GCTGGCCTTT
TGCTCACATG TTCTTTCCTG CGTTATCCCC TGATTCTGTG GATAACCGTA TTACCGCCTT TGAGTGAGCT
GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA
TACGCAAACC GCCTCTCCCC GCGCGTTGGC CGATTTCATTA ATGCAGCTGG CACGACAGGT TTCCCAGCTG
GAAAGCGGGC AGTGAGCGCA ACGCAATTAA TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC
TTTATGCTTC CGGCTCGTAT GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG
ACCATGATTA CGCCAAGCTC CTTCTCTTTC CAGCCCTTCC TCTTCTACTG ACTGACTGAC TGCGTCTCAA
```



[View online »](#)

CCTTTTCTGC CACGTAAGTC TGCCCTACTT TGCTTTTGAC TTGAGAAGGG GTCAGTCAAG AAGGCATCCA
 CGTAGCGGGA AGGGGAAAA AAAAAAGAA GGCATCTACG TCCTGATTTG TACGCCCTTT CCTCCATTGA
 ACCGGGCTGG GATGCGGGCT AGGGCTGGGA ATTTCCGGCC TTAGGATGAA CCATGCAGTG CACAGACAGT
 CACGTCGCTT ATTAGGTCGC AAGGAAGGCG AAGCAGCCAT CCCCAGAAGC TCTTCATACA CACACACACA
 CACACACACA CACACACACA CACACACGCC ACACACACAC ACTCGTAACT ACAAAGCCTG TGGCATTGCA
 CCCTAAAACT TGGCCACTCG CTCCGCCCCC GGGCCCCGCG TCCAATGCTC TCCCTCCCAG TCCCACACCC
 GCTTTATAAA GTGGGGCTTT AGGTGCAACC GTGAAACGCT TATGAGCTAC GGGCTCCAGA TCTTCTCTG
 CACCAGAGCA AGTCTAAGTC TGAGCCGGCT CCCCAGAAC TCCAGCTGCT GGGTCTTGAA CTCCTGCGTT
 CCGGAGTCTT AGCGTTGCTG CACCCAAGGC CACCCCAGA ATCACTAGCA TGGAGAGCGA CGAGAGCGGC
 CTGCCCGCCA TGGAGATCGA GTGCCGCATC ACCGGCACCC TGAACGGCGT GGAGTTCGAG CTGGTGGGCG
 GCGGAGAGGG CACCCCGAG CAGGGCCGCA TGACCAACA GATGAAGAGC ACCAAAGGCG CCCTGACCTT
 CAGCCCCTAC CTGCTGAGCC ACGTGATGGG CTACGGCTTC TACCACTTCG GCACCTACCC CAGCGGCTAC
 GAGAACCCCT TCCTGCACGC CATCAACAAC GCGGGCTACA CCAACACCCG CATCGAGAAG TACGAGGACG
 GCGGCGTGCT GCACGTGAGC TTCAGCTACC GCTACGAGGC CGGCCGCGTG ATCGGCGACT TCAAGGTGAT
 GGGCACCGGC TTCCCGAGG ACAGCGTGAT CTTACCAGC AAGATCATCC GCAGCAACGC CACCGTGGAG
 CACCTGCACC CCATGGGCGA TAACGATCTG GATGGCAGCT TCACCCGCAC CTTCAGCCTG CGCGACGGCG
 GCTACTACAG CTCCGTGGTG GACAGCCACA TGCACTTCAA GAGCGCCATC CACCCAGCA TCCTGCAGAA
 CGGGGGCCCC ATGTTCCGCT TCCGCCGCGT GGAGGAGGAT CACAGCAACA CCGAGCTGGG CATCGTGGAG
 TACCAGCAGC CCTTCAAGAC CCCGGATGCA GATGCCGGTG AAGAAAGAGT TTAAGAATTC CGATCATATT
 CAATAACCT TAATATAACT TCGTATAATG TATGCTATAC GAAGTTATTA GGTCTGAAGA GGAGTTTACG
 TCCAGCCAAG CTTAGGATCT CGACCTCGAA ATTCTACCGG GTAGGGGAGG CGTTTTTCCC AAGGCAGTCT
 GGAGCATGCG CTTTAGCAGC CCCGTGGGC ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT
 CCACATCCAC CGGTAGGCGC CAACGACTC CGTTCTTTGG TGGCCCTTC GGCACACTT CTACTCTCC
 CCTAGTCAGG AAGTTCCTCC CGGCCCGCA GCTCGCGTCG TGCAGGACGT GACAAAATGGA AGTAGCACGT
 CTAAGTAGTC TCGTGCAGAT GGACAGCACC GCTGAGCAAT GGAAGCGGGT AGGCCTTTGG GGCAGCGGCC
 AATAGCAGCT TTGCTCCTC GCTTTCTGGG CTCAGAGGCT GGAAGGGGT GGGTCCGGGG GCGGGCTCAG
 GGGCGGGCTC AGGGGCGGGG CGGGCGCCG AAGGTCTCC GGAGGCCCGG CATTCTGCAC GCTTCAAAAG
 CGCACGTCTG CCGCGCTGTT CTCCTCTTCC TCATCTCCGG GCCTTTTCGAC CTGCATCCAT CTAGATCTCG
 AGCAGCTGAA GCTTACCATG ACCGAGTACA AGCCACGGT GCGCCTCGCC ACCCGCAGC ACGTCCCCAG
 GGGCGTACG ACCCTCGCG CCGCGTTCG CACTACCCC GCCACGCGCC ACACCGTGA TCCGGACCGC
 CACATCGAGC GGGTCACCGA GCTGCAAGAA CTCTTCTCA CGCGCGTCGG GCTCGACATC GGCAAGGTGT
 GGGTCGCGGA CGACGGCGCC GCGGTGGCGG TCTGACCAC GCCGGAGAGC GTCGAAGCGG GGGCGGTGTT
 CGCCGAGATC GGCCCGCGCA TGGCCGAGTT GAGCGGTTCC CGGCTGGCCG CGCAGCAACA GATGGAAGGC
 CTCTGGCGC CGCACCGGCC CAAGGAGCCC GCGTGTTTCC TGGCCACCGT CGGCGTCTCG CCCGACCACC
 AGGGCAAGGG TCTGGGCAGC GCCGTCGTGC TCCCGGAGT GGAGGCCGCC GAGCGCGCCG GGGTCCCCGC
 TTCTCTGGAG ACCTCCGCGC CCCACAACCT CCCCTTCTAC GAGCGGCTCG GCTTCACCGT CACCGCCGAC
 GTCGAGGTGC CCGAAGGACC GCGCACCTGG TGCATGACCC GCAAGCCCGG TGCCTGACGC CCGCCCCAG
 ACCCGCAGCG CCCGACCGAA AGGAGCGCAC GACCCCATGC ATCGATGATA TCAGATCCCC GGGATGCAGA
 AATTGATGAT CTATTAACA ATAAAGATGT CCACTAAAAA GGAAGTTTTT CCTGTACAT TTTGTTAAGA
 AGGGTGAGAA CAGAGTACCT ACATTTTGAA TGAAGGATT GGAGCTACGG GGGTGGGGT GGGGTGGGAT
 TAGATAAATG CCTGCTCTTT ACTGAAGGCT CTTTACTATT GCTTTATGAT AATGTTTCAT AGTTGGATAT
 CATAATTTAA ACAAGCAAAA CCAAAATTAAG GGCCAGCTCA TTCCTCCAC TCATGATCTA TAGATCTATA
 GATCTCTCGT GGGATCATTG TTTTCTCTT GATTCCCACT TTGTGTTTCT AAGTACTGTG GTTTCCAAAT
 GTGTCAGTTT CATAGCCTGA AGAACGAGAT CAGCAGCTC TGTTCCACAT ACACTTCATT CTCAGTATTG
 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTCGAGATC CGGAACCCTT AATATAACTT CGTATAATGT
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGCCG **CTACAGCTCG** **GCCATGGGCT**
GCGCGAACAC **GTGGAGCGCA** **CCCGTGGGCA** **GCTGGGCGCG** **CTGGAGCGCC** **GCATGGCTGC** **CTGTGGTAAC**
GCTTGTACAG **GGCCAAGGG** **AAAAGATGCA** **CCCTTCAAAG** **ACTCCGAGGA** **TAGAGTCCCT** **GAAGGCCAGA**
CTCCTGAGAC **TCTGCAGAGT** **TTGCAGGTAG** **GCGCATCTAC** **TAGGACTCTG** **ACTCTACTTA** **GACTAACGAG**
TCTAGTACTC **CAGGACCTGG** **GTGGAGAAGG** **GCCTCAGAGC** **AGACTGTGAA** **AGGGTAGAAG** **GGAGGGTGAA**
TAAGAGGAGG **TTGCCGACAT** **AAAGCCAGGT** **CTTCACTAGC** **CTTGATATC** **TTCAGACTCA** **GCTCAAGGCT**
CAAAACAGCA **AGATCCAGCA** **ATTGTTCCAG** **AAGGTGGCCC** **AGCAGCAGAG** **ATACCTATCA** **AAGCAGAATC**

TGAGAATACA GAATCTTCAG AGCCAGGTAA TTACCCAGC AATTGGCCCA AATGGGAAAG AGGAAACAAA
 GTGGGGTGA AATGTAGTGA TGAATGTGG CTAAGCAGTT GTTATGGCAT GAGTCAAAAG ATCTAACCCAC
 CCGTTTCCTG CCCGGTCTTA GCAAGAGACG ACTGACTGAC TGACTGGAAA GTCCTCTCCA CTGACTGTAG
 CCTCCAATTC ACTGGCCGTC GTTTTACAAC GTCGTGACTG GGAAAACCCT GGC GTTACCC AACTTAATCG
 CCTTGAGCA CATCCCCCTT TCGCCAGCTG GCGTAATAGC GAAGAGGCC GCACCGATCG CCCTGCCAA
 CAGTTGCGCA GCCTGAATGG CGAATGGCGC CTGATGCGGT ATTTTCTCCT TACGCATCTG TCGGTATTT
 CACACCGCAT ACGTCAAAGC AACCATAGTA CGCGCCCTGT AGCGGCCAT TAAGCGCGC GGTGTGTG
 GTTACGCGCA GCGTGACCGC TACACTTGCC AGCGCCCTAG CGCCCGCTCC TTTCGCTTTC TTCCCTTCT
 TTCTCGCCAC GTTCGCCGGC TTTCCCGTC AAGCTCTAAA TCGGGGGCTC CCTTTAGGGT TCCGATTTAG
 TGCTTTACGG CACCTCGACC CCAAAAAACT TGATTTGGGT GATGGTTCAC GTAGTGGGCC ATCGCCCTGA
 TAGACGGTTT TTCGCCCTTT GACGTTGGAG TCCACGTTCT TTAATAGTGG ACTCTTGTTT CAAACTGGAA
 CAACACTCAA CCCTATCTCG GGCTATTCTT TTGATTTATA AGGGATTTTG CCGATTTCCG CCTATTGGTT
 AAAAAATGAG CTGATTTAAC AAAAAATTA CGCGAATTTT AACAAAATAT TAACGTTTAC AATTTTATGG
 TGCACTCTCA GTACAATCTG CTCTGATGCC GCATAGTTAA GCCAGCCCG ACACCCGCCA ACACCCGCTG
 ACGCGCCCTG ACGGGCTTGT CTGCTCCCG CATCCGCTTA CAGACAAGCT GTGACCGTCA ACGGGAGCTG
 CATGTGTGAG AGGTTTTTAC CGTCATCACC GAAACGCGCG ACCCGAAAG GCCTCGTGAT ACGCCTATTT
 TTATAGGTTA ATGTCATGAT AATAATGGTT TCTTAGACGT CAGGTGGCAC TTTTCGGGA AATGTGCGCG
 GAACCCCTAT TTGTTTATTT TTCTAAATAC ATTCAAATAT GTATCCGCTC ATGAGACAAT AACCCGATA
 AATGCTTCAA TAATATTGAA AAAGGAAGAG TATGAGTATT CAACATTTCC GTGTCGCCCT TATTCCCTTT
 TTTGCGGCAT TTTGCCTTCC TGTTTTTGT CACCCAGAAA CGCTGGTGAA AGTAAAAGAT GCTGAAGATC
 AGTTGGGTGC ACGAGTGGGT TACATCGAAC TGGATCTCAA CAGCGGTAAG ATCCTTGAGA GTTTTCGCCC
 CGAAGAAGCT TTTCCAATGA TGAGCACTTT TAAAGTTCTG CTATGTGGCG CGGTATTATC CCGTATTGAC
 GCCGGGCAAG AGCAACTCGG TCGCCGCATA CACTATTCTC AGAATGACTT GGTGAGTAC TCACCGTCA
 CAGAAAAGCA TCTTACGGAT GGCATGACAG TAAGAGAATT ATGCAGTGCT GCCATAACCA TGAGTGATAA
 CACTGCGGCC AACTTACTTC TGACAACGAT CGGAGGACCG AAGGAGCTAA CCGCTTTTTT GCACAACATG
 GGGGATCATG TAACTCGCCT T

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_020581](#)

UniProt ID:

[Q9Z1P8](#)

Synonyms:

Arp4; Bk89; Fiaf; Hfarp; Ng27; Pgar; Pgarg; Pp1158

Summary:

Mediates inactivation of the lipoprotein lipase LPL, and thereby plays a role in the regulation of triglyceride clearance from the blood serum and in lipid metabolism (PubMed:15837923, PubMed:17609370, PubMed:29899519). May also play a role in regulating glucose homeostasis and insulin sensitivity (PubMed:15837923, PubMed:29899519). Inhibits proliferation, migration, and tubule formation of endothelial cells and reduces vascular leakage (PubMed:14583458, PubMed:17130448, PubMed:21832056). Upon heterologous expression, inhibits the adhesion of endothelial cell to the extracellular matrix (ECM), and inhibits the reorganization of the actin cytoskeleton, formation of actin stress fibers and focal adhesions in endothelial cells that have adhered to ANGPTL4-containing ECM (in vitro) (By similarity). Depending on context, may modulate tumor-related angiogenesis (Probable). [UniProtKB/Swiss-Prot Function]

Product images:

